REMARKS

Status of the Claims.

Claims 1-7, 10-13, 16, 18, 19, and 22-25 are pending with entry of this amendment, claims 8-9, 14-15, 17, and 20-21 being canceled and no new claims being added herein.. Claims 1 and 12 are amended herein. This amendment introduces no new matter. Support is replete throughout the specification and claims as filed (*see, e.g.,* paragraph 0032 at pages 11-12 *etc.*).

Election/Restriction.

Pursuant to a restriction requirement made final, Applicants cancel claims 8, 9, 14, 15, 17, 20, 21, and 26-63 with entry of this amendment. Please note, however, that Applicants reserve the right to file subsequent applications claiming the canceled subject matter and the claim cancellations should not be construed as abandonment or agreement with the Examiner's position in the Office Action.

Information Disclosure Statement.

Applicants note with appreciation the Examiner's thorough consideration of the references cited in the Information Disclosure Statements (1449 Forms) submitted on June 20, 2003.

Objection to the specification.

The Examiner objected to the disclosure as allegedly containing and embedded hyperlink and/or other form of browser-executable code at paragraph 0228. Applicants copy of the application has no paragraph 0228, however, paragraph 0193, at page 56 contained the text "(URL:http://www.informatics.jax.org)".

This paragraph is amended herein to recite "(www.informatics.jax.org)".

M.P.E.P. §7.29.03 expressly states:

> Examiners must review patent applications to make certain that hyperlinks and other forms of browser-executable code, especially commercial site URLs, are not included in a patent application. Examples of a hyperlink or a browser-executable code are a URL placed **between these symbols "< >" and http:// followed by a**

> **URL address**. When a patent application with embedded hyperlinks and/or other forms of browser-executable code issues as a patent (or is published as a patent application publication) and the patent document is placed on the USPTO web page, when the patent document is retrieved and viewed via a web browser, the URL is interpreted as a valid HTML code and it becomes a live web link. When a user clicks on the link with a mouse, the user will be transferred to another web page identified by the URL, if it exists, which could be a commercial web site. USPTO policy does not permit the USPTO to link to any commercial sites since the USPTO exercises no control over the organization, views or accuracy of the information contained on these outside sites. [emphasis added]

The amended paragraph includes neither the "<>" symbols nor "http://". Accordingly, the amended text is not a hyperlink or browser executable code and the Examiner's objection is obviated.

35 U.S.C. §112, second paragraph.

Claims 1-5, 7, 10-13, 16, 18, 19, and 22-25 were rejected under 35 U.S.C. §112, second paragraph as allegedly indefinite in the recitation of "Lpin1" and "lipin". In particular, the Examiner alleged that it is not clear form the specification or claims what constituted "Lpin1 gene" or "lipin". In addition the Examiner alleged that it cannot be determine if the "lpin1 gene" or "lipin" is the same or different from the fatty liver dystrophy gene. Applicants traverse.

Claim 1, as amended herein recites:

> 1. A method of screening for an agent that alters adipose tissue development said method comprising:
>
> contacting a cell comprising a Lpin1 gene **encoding a polypeptide comprising an NLIP domain and a CLIP domain**, with a test agent; and
>
> detecting a change in the expression or activity of a Lpin1 gene product as compared to the expression or activity of a Lpin1 gene product in a cell that is contacted with the test agent at a lower concentration, where a difference in the expression or activity of said Lpin1 gene product in the contacted cell and the cell that is contacted with the lower concentration indicates that said agent alters adipose tissue development.

thus specifically identifying Lpin1 gene by reference to specific encoded sequences. Figure 4 shows the amino acid sequences and alignment of lipin NLIP domains and CLIP domains in a number of species. Accordingly, the LPIN1 gene is unambiguously identified by reference to relevant sequence information and the claim is not indefinite. Claim 12 is similarly amended and therefore not indefinite as well. Consequently, the rejection under 35 U.S.C. §112, second paragraph, should be withdrawn.

35 U.S.C. §102.

Claims 1-5, 7, 10-13, 16, 18, 19, and 22-25 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by Klingenspor *et al.* (1999) *J. Biol. Chem.*, 274(33): 23078-23084. Applicants traverse.

The Examiner is respectfully reminded that anticipation requires that "all limitations of the claim are found in the reference, or 'fully met' by it." *Kalman v Kimberly-Clark Corp.*, 218 USPQ 781, 789 (Fed. Cir. 1983).

In the instant case, claim 12 recites:

> 1. A method of screening for an agent that alters adipose tissue development said method comprising:
>
> contacting a cell comprising a Lpin1 gene **encoding a polypeptide comprising an NLIP domain and a CLIP domain**, with a test agent; and
>
> detecting a change in the expression or activity of a Lpin1 gene product as compared to the expression or activity of a Lpin1 gene product in a cell that is contacted with the test agent at a lower concentration, where a difference in the expression or activity of said Lpin1 gene product in the contacted cell and the cell that is contacted with the lower concentration **indicates that said agent alters adipose tissue development**.

while claim 12 recites:

> 12. A method of prescreening for an agent that **alters adipose tissue development**, said method comprising:
>
> i) contacting a nucleic acid **encoding a polypeptide comprising an NLIP domain and a CLIP domain** with a test agent; and
>
> ii) detecting **specific binding of said test agent to said nucleic acid.**

In contrast, Klingenspor *et al.:*

1) Fails to identify a gene responsible for the fld phenotype;

2 Fails to examine/or identify abnormal/altered adipose tissue development; and

3) Fails to identify a gene that encodes a polypeptide comprising an NLIP domain and a CLIP domain.

To the contrary, Klingenspor *et al.* expressly states:

> Although genetic mapping results **excluded *Ifld1* and *Ifld2* as *fld* gene candidates**, their similarity to known proteins involved in signal transduction and the striking induction of the corresponding mRNAs in the *fld* fatty liver suggested that they might represent an important **secondary response to the underlying defect** . . . [emphasis added] (page 23080, col. 2).

Thus, Klingenspor *et al.* expressly teaches that Ifld1 and Ifld2 **are not** causal for the fld phenotype. In addition, neither Ifld1 nor Ifld2 nor their encoded proteins are sequenced. There is no teaching of a gene that encodes a protein comprising an NLIP domain and a CLIP domain or that a gene encoding such a protein is implicated in adipose tissue development.

Klingenspor *et al.* thus fails to identify a number of elements of the presently pending claims and the Examiner has failed to make her *prima facie* case of obviousness. Accordingly, the rejection of claims 1-5, 7, 10-13, 16, 18, 19, and 22-25 under 35 U.S.C. §102(b) should be withdrawn.

35 U.S.C. §103(a).

Claim 6 was rejected under 35 U.S.C. §103(a) over Klingenspor *et al.* in view of Felder *et al.* (U.S. Patent 6,232,066 B1). The Examiner alleged that Klingenspor *et al.* fails to teach the use of an array to detect a change in expression or activity of the gene product and relied on Felder *et al.* as teaching the use of probe arrays in methods of screening for candidate agents that6 effect a disease state. Applicants traverse.

As explained above, Klingenspor *et al.:*

1) Fails to identify or otherwise teach or suggest a gene responsible for the fld phenotype;

2 Fails to examine/or identify abnormal/altered adipose tissue development; and

3) Fails to identify a gene that encodes a polypeptide comprising an NLIP domain and a CLIP domain.

To the contrary, Klingenspor *et al.* expressly excludes Ifld1 and Ifld2 as fld gene candidates. These defects are not remedied by Felder *et al.* Felder *et al.* only pertains to high throughput assay systems utilizing repeated arrays of probes. There is no teaching or suggestion or discussion whatsoever of an *Fld* phenotype or of any genes implicated in such a phenotype. The combination of Klingenspor *et al.* and Felder *et al.* thus fails to teach or suggest the presently claimed invention and the rejection of claim 6 under 35 U.S.C. §103(a) should be withdrawn.

In view of the foregoing, Applicants believes all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. Should the Examiner seek to maintain the rejections, Applicants request a telephone interview with the Examiner and the Examiner's supervisor.

If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (510) 769-3513.

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